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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/805,776	03/22/2004	Gene A. Frantz	TI-37762	9940

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EXAMINER

TRUVAN, LEYNNA THANH

ART UNIT	PAPER NUMBER
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2435

NOTIFICATION DATE	DELIVERY MODE
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11/17/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/805,776	Applicant(s) FRANTZ, GENE A.	
	Examiner Leynna T. Truvan	Art Unit 2435	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-10 is/are pending in the application.
- 4a) Of the above claim(s) 7 and 11-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-6 and 8-10 are pending.
Claims 7 and 11-25 are cancelled.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/23/10 has been entered.

Response to Arguments

3. Applicant's arguments filed 7/23/10 have been fully considered but they are not persuasive.

Claims 1-5 remain rejected under 35 U.S.C. 112, 2nd paragraph. Applicant does not explain or provide evidence as to how the means plus function claims comply with the requirements of 35 USC § 112, 6th paragraph.

As for argument on pg. 5, that Lee and Folmsbee alone or in combination do not suggest or show motivation for modifying the reference or to combine the reference teachings. Folmsbee discusses the program is identified by a key and a serial number of the CPU, stored on the CPU (col.8, lines 37-40) which to provide verification of the

Art Unit: 2435

authenticity (col.9, lines 35-37). Folmsbee discloses the CPU (processor) includes serial number and having a plurality of memory stores (col.5, lines 29-31 – i.e. RAM, EPROM, ROM) for storing the serial numbers so it is obvious the serial numbers can be retrieved from the memory if they were stored therein (col.13, lines 16-36). Although, Folmsbee includes plurality of memory stores for storing the serial numbers but did not clearly discuss retrieving the serial number from non-volatile memory unit. Thus, Lee is brought forth to teach retrieval of the serial number from a particular memory which is as claimed from a non-volatile memory unit. The Lee reference discloses a method and apparatus for encrypting and decrypting a microprocessor serial number. Thus, similar to the Folmsbee invention, both references teach the encryption and decryption of a serial number. The claimed invention did not particularly claim what the serial number is in reference to i.e. device, software, processor, etc. As such, both Folmsbee and Lee teach the serial number of a processor (Folmsbee-col.5, lines 21-25 and Lee-col.2, lines 52-53). Both Folmsbee and Lee discloses storing the serial number in a memory (Folmsbee-col.4, lines 47-48), but Lee particularly discloses the serial number is stored in a non-volatile memory as claimed (Lee-col.2, lines 8-9). Hence, the Folmsbee and Lee references teach or suggest similar limitations which do suggest and show motivation for modifying or combining the reference teachings that shows a prima facie case of obviousness.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention.

Regarding claim 1, the word "means" is preceded by the word(s) "retrieving" and "decrypting" in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding "means," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See Ex parte Klumb, 159 USPQ 694 (Bd. App. 1967).

The means for retrieving a serial number, means for retrieving decryption procedure, and means for decrypting are not particularly defined or stated in the specification. Plus, it is unclear whether the means for retrieving a serial number and means for retrieving decryption procedure are performed by the same means which again was not clearly explained in the specification. On page 5 of the specification, lines 4-8 indicate the transferring of signals between the input/output unit, a memory unit, and a non-volatile memory unit. Specification neither supports the particular means for retrieving a serial number nor means for retrieving decryption procedure. All specification suggests are the signals exchanged between different units to access information which does not suggest means for performing a specified function. Further, specification (pg.5, lines 8-10) states the memory unit typically includes the decryption

program and encrypted files. Thus, the means for decrypting is not clearly shown by any specific computer as a function to perform the means to decrypt.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-6 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Folmsbee (US 7,225,322), and further in view of Lee, et al. (US 5,774,544).

As per claim 1:

Folmsbee discloses a data processing unit for executing an encrypted software executable program, the data processing unit comprising:

means for *retrieving a serial number* from non-volatile memory unit; (**col.1, lines 58-60 and col.14, lines 10-60**)

means for retrieving decryption procedure (**col.5, lines 29-31 and col.18, lines 42-52**), wherein the processing unit is the unit that can retrieve the serial number from the non-volatile memory unit; (**col.8, lines 35-40 and col.22, lines 55-59**)

means for decryption an encrypted software program using the retrieved serial number as an encrypted key and the decryption procedure. (col.7, lines 1-12 and col.8, lines 23-26 and col.19, lines 20-30)

Folmsbee discusses the program is identified by a key and a serial number of the CPU, stored on the CPU (col.8, lines 37-40) which to provide verification of the authenticity (col.9, lines 35-37). Folmsbee discloses the CPU (processor) includes serial number and having a plurality of memory stores (col.5, lines 29-31 – i.e. RAM, EPROM, ROM) for storing the serial numbers so it is obvious the serial numbers can be retrieved from the memory if they were stored therein (col.13, lines 16-36). Although, Folmsbee includes plurality of memory stores for storing the serial numbers but did not clearly discuss retrieving the serial number from non-volatile memory unit.

Lee discloses the invention relates to encrypting and decrypting microprocessor serial numbers. Lee discloses according to the prior art that the serial numbers uniquely identify workstations and may be associated with particular software (col.1, lines 13-19 and 27-28) which is serializing software defined as providing a CPU serial number to a given set of software (col.1, lines 49-50). Lee discloses the serial number in the NVRAM and access to the NVRAM and hence the serial number is controlled via encryption keys and logic on the processor (col.3, lines 55-61). Lee further discloses retrieving the serial numbers from the processor's nonvolatile memory (col.10, lines 9-11). Therefore, it would have been obvious for a person of ordinary skills in the art to combine the inventions of Folmsbee with Lee to teach retrieving a serial number from non-volatile memory unit because to provide easy access and prevents unauthorized

Art Unit: 2435

access such that software that has been serialized to a particular processor can detect that it is running on an unauthorized processor (Lee - col.2, lines 5-22).

As per claim 2: see Folmsbee on col.5, lines 20-26; discussing data processing unit as recited in claim 1 wherein the encrypted executable program is stored in the memory unit.

As per claim 3: see Folmsbee on col.15, lines 20-67; discussing the data processing unit as recited in claim 1 wherein the encrypted executable program is stored in an external memory unit.

As per claim 4: see Folmsbee on col.4, lines 47-48 and Lee on col.5, lines 20-21; discussing the data processing unit as recited in claim 1 wherein the serial number relates to the data processing unit.

As per claim 5: see Folmsbee on col.4, lines 46-65 and col.8, lines 36-40 and Lee on col.1, lines 13-15; discussing the data processing unit as recited in claim 1 wherein the serial number is associated with a plurality of data processing units.

As per claim 6:

Folmsbee discloses a method for protecting software programs, the method comprising:

retrieving a serial number from non-volatile memory unit; (**col.1, lines 58-60 and col.14, lines 10-60**)

retrieving decryption procedure (**col.5, lines 29-31 and col.18, lines 42-52**), wherein the processing unit is the unit that can retrieve the serial number from the non-volatile memory unit; (**col.8, lines 35-40 and col.22, lines 55-59**)

decryption an encrypted software program using the retrieved serial number as an encrypted key and the decryption procedure; (**col.7, lines 1-12 and col.8, lines 23-26 and col.19, lines 20-30**)

Folmsbee discusses the program is identified by a key and a serial number of the CPU, stored on the CPU (col.8, lines 37-40) which to provide verification of the authenticity (col.9, lines 35-37). Folmsbee discloses the CPU (processor) includes serial number and having a plurality of memory stores (col.5, lines 29-31 – i.e. RAM, EPROM, ROM) for storing the serial numbers so it is obvious the serial numbers can be retrieved from the memory if they were stored therein (col.13, lines 16-36). Although, Folmsbee includes plurality of memory stores for storing the serial numbers but did not clearly discuss retrieving the serial number from non-volatile memory unit.

Lee discloses the invention relates to encrypting and decrypting microprocessor serial numbers. Lee discloses according to the prior art that the serial numbers uniquely identify workstations and may be associated with particular software (col.1, lines 13-19 and 27-28) which is serializing software defined as providing a CPU serial number to a given set of software (col.1, lines 49-50). Lee discloses the serial number in the NVRAM and access to the NVRAM and hence the serial number is controlled via encryption keys and logic on the processor (col.3, lines 55-61). Lee further discloses retrieving the serial numbers from the processor's nonvolatile memory (col.10, lines 9-11). Therefore, it would have been obvious for a person of ordinary skills in the art to combine the inventions of Folmsbee with Lee to teach retrieving a serial number from non-volatile memory unit because to provide easy access and prevents unauthorized

Art Unit: 2435

access such that software that has been serialized to a particular processor can detect that it is running on an unauthorized processor (Lee - col.2, lines 5-22).

As per claim 8: see Folmsbee on col.4, lines 47-48 and Lee on col.5, lines 20-21; discussing the method as recited in claim 6 wherein the serial number relates to the data processing unit.

As per claim 9: see Folmsbee on col.15, lines 20-67; discussing the method as recited in claim 6 wherein the encrypted executable program is stored external to the data processing unit.

As per claim 10: see Folmsbee on col.4, lines 46-65 and col.8, lines 36-40; discussing the method as recited in claim 6 wherein the encrypted executable program is stored in data processing unit.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leynna T. Truvan whose telephone number is (571) 272-3851. The examiner can normally be reached on Monday - Thursday (7:00 - 5:00PM) and telework on Wednesday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/L. T. T./
Examiner, Art Unit 2435

/Kimyen Vu/

Supervisory Patent Examiner, Art Unit 2435